Work Order ID 111634-5-1

February-11-14 12:40:36 PM

111634-5-1

Item ID: D4903-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: Fwd Skipaw, RH **Stop** *NS2*

Start Date: 11/02/2014 **Start Qty:** 1.00 *1*

Required Date: 28/02/2014 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** AH **Date:** 14-02-11 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Draw Nbr	Revision Nbr
D4903	REV. B

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	HAAS CNC VERTICAL MACHINING #1	0.00							
130									
HAAS 1	**Memo**	0.00							
HAAS CNC vertical machine #1	1-Inspect material for defects or damage prior to machining 2-Machine as per Folio and Dwg D4903 3-Debur PROGRAM REV: B FOLIO REV: A4 PULL FROM STOCK D4903-1 BATCH 105952 REWORK TO REV B.								
						OK 14/02/16	1	0	
140	QC2- Inspect parts off machine FAI/FAIB	0.00							
140						OK 14/02/16			
QC	**Memo**	0.00							
Quality Control						D.A	1	0	

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Work Order ID 111634-5-1

February-11-14 12:40:36 PM

111634-5-1

Item ID: D4903-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Fwd Skipaw, RH

Start Date: 11/02/2014 **Start Qty:** 1.00 *1*

Required Date: 28/02/2014 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC8- Inspect parts - second check	0.00							
150									
QC	**Memo**	0.00				1	0		
Quality Control									
160	Identify as per dwg & Stock Location: GA	0.00			DAS 30 9-89				
160									
Packaging	**Memo**	0.00				1			14/02/25
Packaging	RE-PACKAGE WITH NEW BATCH NUMBER								
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	**Memo**	0.00					14-02-25		
Quality Control									

14-02-24

14-02-25

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

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- ☐ Wave/Twist in Tube

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- ☐ Bend
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- ☐ Burrs
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- ☐ Cut Too Short
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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

February-11-14 12:40:41 PM

Work Order ID: 111634-5-1

111634-5-1

Parent Item: D4903-1

D4903-1

Parent Item Name: Fwd Skipaw, RH

Start Date: 11/02/2014 **Required Date:** 28/02/2014

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP REV:A NEW ISSSUE 13-08-27 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4903-1		Manufactured	No				Each	0.0000		1			
D4903-1 Fwd Skipaw, RH							DAS 30 ~~9-89~~		**	1			

14/02/25

Pull from Stock (1)

B # 105952

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

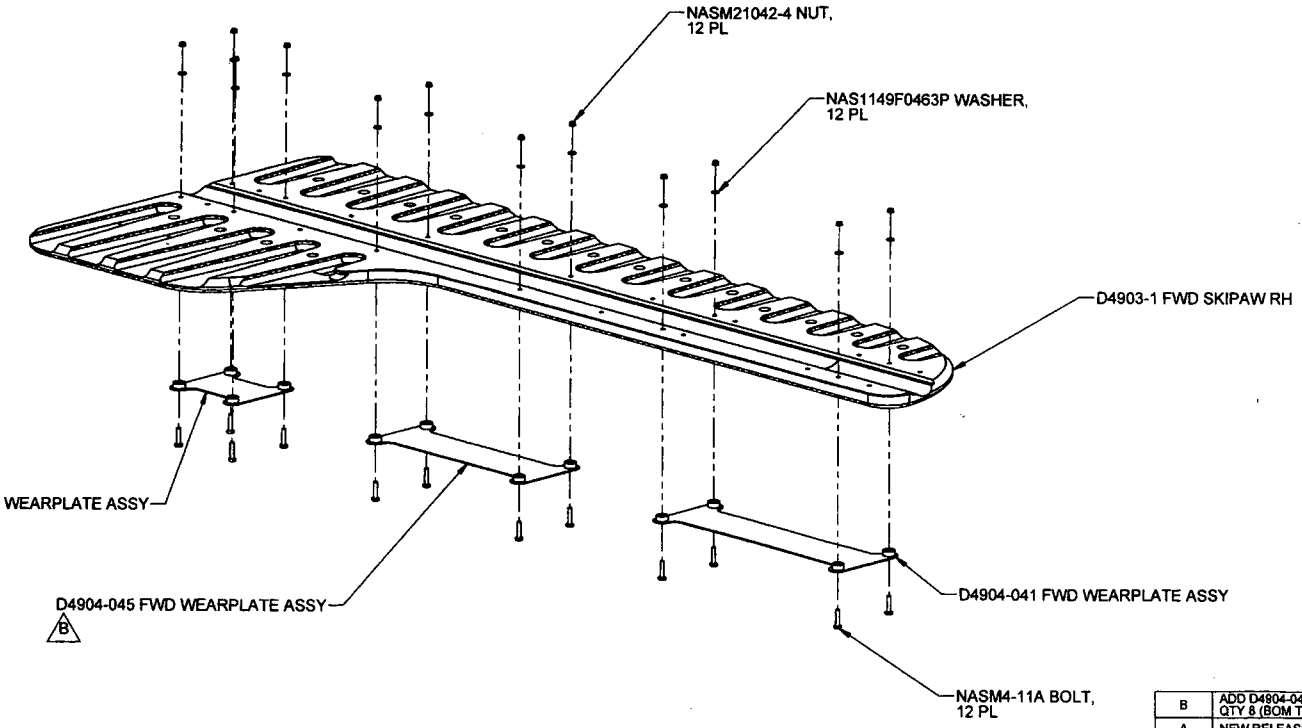
Landing Gear

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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4903-041	FWD SKIPAW RH ASSY
1	1	D4903-1	FWD SKIPAW RH
2	1	D4904-041	FWD WEARPLATE ASSY
3	1	D4904-045	FWD WEARPLATE ASSY
4	1	D4904-047	WEARPLATE ASSY
5	12	NASM21042-4	NUT (MS21042-4)
6	12	NAS1149F0463P	WASHER
7	12	NASM4-11A	BOLT (AN4-11A)



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. LLL634-5-1 MP
14-02-11

RELEASED
2013-12-05

D4903-041 FWD SKIPAW ASSY RH

REV.	DESCRIPTION	BY	DATE
B	ADD D4804-045/-047 WEARPLATES (SH 1), QTY 12 WAS QTY 8 (BOM TABLE), 24 PL WAS 12 PL (ZN B3-2)	DB	13.11.20
A	NEW RELEASE	DB	13.07.22

DESIGN	DB	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	DB	
CHECKED	AP	DRAWING NO. D4903 REV. B
MFG. APPR.	JLM	SHEET 1 OF 2
APPROVED	MP	TITLE FWD SKIPAW RH SCALE NTS
DE APPR.	DB	
DATE	13.11.22	

APPROVED

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DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
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Setup	☐									
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Supplier	☐									
Training	☐									
Unapproved	☐									

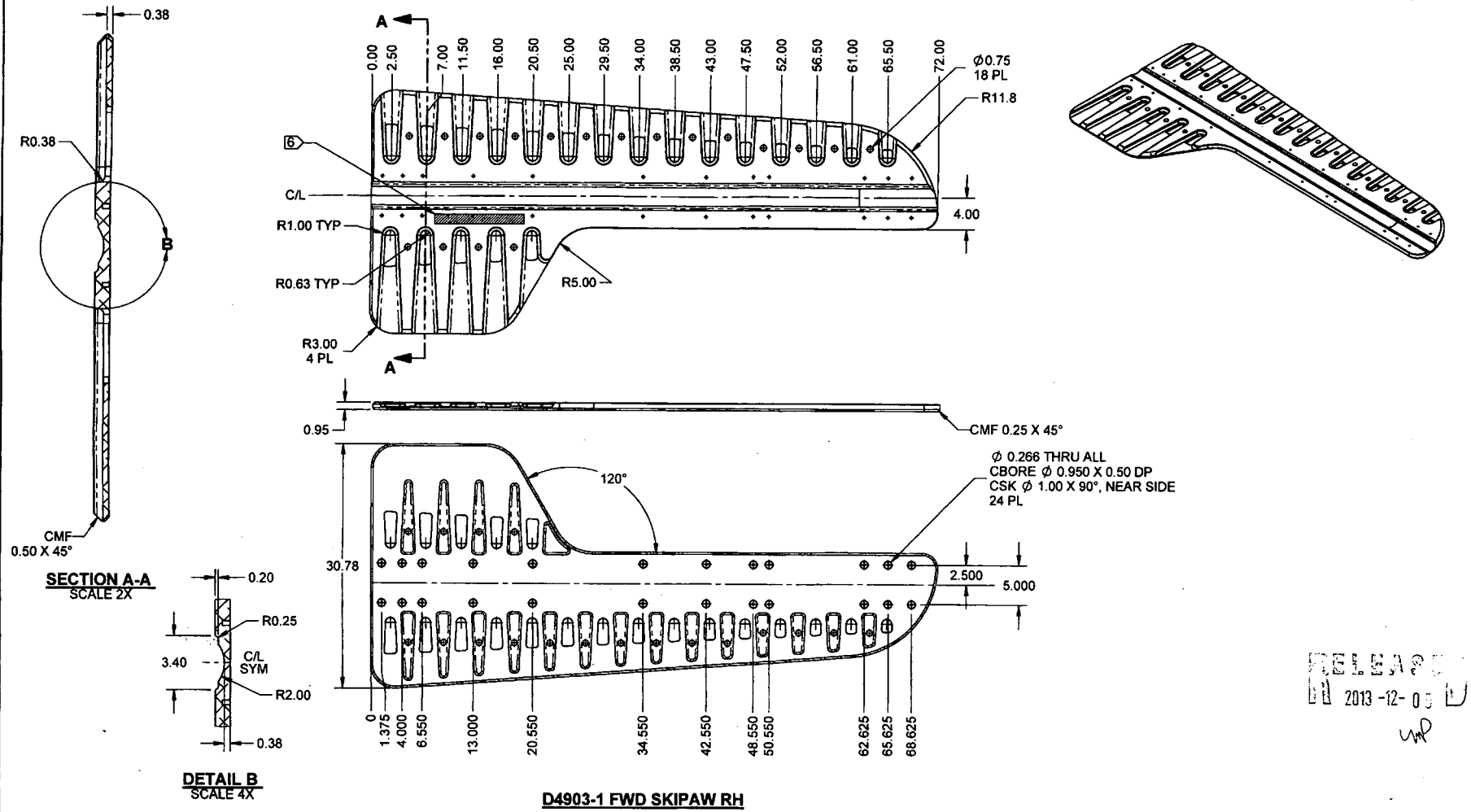
FAULT CATEGORY

Landing Gear

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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other



SECTION A-A
SCALE 2X

DETAIL B
SCALE 4X

D4903-1 FWD SKIPAW RH

RELEASED
DL 2013-12-05
UMP

NOTES:
1) MATERIAL: BLACK UHMW TIVAR 1000 VIRGIN MATERIAL SHEET, 1.00 THICK
REF DART SPEC MUHMWB100
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: ENGRAVE DART P/N "D4903-1" AND B/N USING 0.13 HIGH LETTERS TO MAX DEPTH OF 0.010 PER QSI 044, METHOD 6.3
7) WEIGHT: 27.12 lbs
8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE D4903-1-B.IGES

APPROVED

DESIGN	DB
DRAWN	DB
CHECKED	AP
MFG. APPR.	JLM
APPROVED	MP
DE APPR.	DS
DATE	13.11.22

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.	REV. B
D4903	SHEET 2 OF 2
TITLE	SCALE
FWD SKIPAW RH	NTS

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WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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AGAINST DEPARTMENT/PROCESS

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- Rec/Store/Packaging ☐
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- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

DART AEROSPACE LTD	Work Order:	111634-4-1
Description: FWD SKI PAD LH	Part Number:	D4902-1
Inspection Dwg: D4902 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.266	+.004 -.001	Ø.268	—		Vern	ML-06
Ø.950	±.010	Ø.950	—		"	"
.50	±.030	.508	—		"	"
Ø1.00 X 90°	±.030 X ±½°	1.030 X 90°	—		"	"
4.000	+/-.010	3.991	✓		"	"
13.000	+/-.010	13.000	✓		Tape	GA-12
42.550	+/-.010	42.550	✓		"	"
50.550	+/-.010	50.550	✓		"	"
62.625	+/-.010	62.625	✓		"	"
68.625	+/-.010	68.625	✓		"	"

Measured by:	[signature] / D.A	Audited by:	[signature]	Preliminary Approval:	
Date:	14/02/26	Date:	14.02.24.	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15